

not covered by Hitchcock and Cronquist (op. cit.) and no reference to that species by any authors subsequent to Rydberg could be found.

Saussurea weberi Hulten. Deer Lodge Co., Sec 36, T4N, R14W, upper W slope of Goat Flats, 2790–2840 m, 28 July 1973, 4583, COLO, MTMG, NY, WTU; same locality, common on SW facing slope, 12 Aug 1973; *Witherspoon and Schaack* 8218, COLO, *Witherspoon* 8222; SW facing slope, *Schaack and Witherspoon* 881, COLO; SW slope, *Schaack and Witherspoon* 883, COLO.

Range Extensions

Pellaea breweri D. C. Eat. Teton Co., Sec 11, T25N, R9W, W slope of Choteau Mt., 2045 m, 28 May 1973, 4285, NY. This locality is 120 km S of the Canadian border and 13 km E of the Continental Divide. Gallatin Co., Sec 25, T1N, R6, E ridge of the Bridger Mts., near Bridger Bowl Ski Area, 2440 m, 12 July 1974, 5185, NY, WTU. Deer Lodge Co., Sec 26, T4N, R14W, S slope of Mt. Tiny, 2837 m, 4 Sept 1974, 5792, COLO, NY, WTU. This fern is probably not as rare as formerly assumed and probably occurs along the Continental Divide to some point south of Glacier Park. Specimens cited here extend the known range 350 km N.

Salix dodgeana Rydb. Bamberg and Major (Ecol. Mongr. 38:127–168. 1968) report it from Flint Creek Mts., Granite Co. The latter is the only previously known station W of the Continental Divide. Deer Lodge Co., Sec 32, T4N, R13W, N slope of Little Rainbow Mt., 2989 m, 2 July 1972, 3769; Sec 31, T4N, R13W, NE slope of Little Rainbow Mt., 2699 m, 13 Aug 1972, 3942, NY; Sec 1, T3N, R14W, Goat Flat below Kurt Peak, 2882 m, 28 July 1973; Sec 6, T2N, R14W, E slope of Goat Peak above Lost Lakes, 2938 m, 21 Aug 1973, 4723, MTMG, NY, WTU. Teton Co., Sec 12, T25N, R9W, W slope of Choteau Mt., East Front Mts., 2440 m, 7 July 1973, 4424, MTMG, NY, WTU. These collections extend its known range 210 km N.

Range Verifications

Carex breweri Bott. var. *paddoensis* (Suksd.) Cronq. Missoula Co., Vacation Pass, Mission Mts., 2684–2745 m, 11 Aug 1968, *Stickney* 1715, USFS; NE head of Albino Basin, Swan Range, 2440 m, 22 Aug 1970, *Stickney* 2213, USFS; Holland Peak, Swan Range, 2715 m, 14 Aug 1970, *Arno* 1002; Holland Peak, 2684 m, 14 Aug 1970, *Arno* 1020. Ravalli Co., saddle E of St. Joseph Peak, Bitterroot Mts., 2867 m, 24 July 1971, 2989, MTMG, WTU; Trapper Peak, 2958 m, 10 Sep 1970, 2605, USFS; Ward Mt., 2730 m, 25 Aug 1970, 2465, COLO, MTMG, NY, USFS. Deer Lodge Co., above Lost Lakes, E cirque of Goat Peaks, 2897–3050 m, 21 Aug 1973, 4667, COLO, and 4704, NY; cirque NE of Goat Peaks, 2890–3019 m, 23 Aug 1974, 5667, WTU. Hitchcock and Cronquist (op. cit.) stated “reputedly Montana”.

Carex rupestris Allioni. Hermann (USDA For. Serv. Agric. Handbook, 1970) includes Montana in the outlined distribution pattern but doesn't mention it explicitly. Bamberg and Major (op. cit.) report it from Glacier Park, the Big Snowy Mts., and the Flint Creek Mts. Teton Co., Choteau Mt., 2440 m, 7 July 1973, 4426, NY. Missoula Co., Holland Peak, Swan Mts., 2684 m, 14 Aug 1971, *Arno* 1015; One Horse Ridge, Lolo Peak, Bitterroot Mts., 2477 m, 11 July 1970, 2136. Ravalli Co., Sweeney Peak, 2775 m, 28 July 1969, 2008, NY, USFS; St. Joseph Peak, 2628–2715 m, 29 Aug 1970, 2512; saddle of St. Joseph Peak, 2867 m, 24 July 1971, 2985, WTU; St. Mary's Peak, 2836 m, Aug 1968, *Arno* 180. Deer Lodge Co., Green Mt., E of Storm Lake, 2097 m, 4 Aug 1973, 4642, MTMG, USFS; Goat Flats, just N of Kurt Peak, 2906 m, 10 Sep 1972, 4122; N above Lost Lakes, E slope of Goat Peaks, 2927 m, 21 Aug 1973, 4719; summit of Pagoda Mt., 0.5 km E of Pintlar Pass, 2867 m, 28 July 1974, 5451. Hitchcock and Cronquist (op. cit.) stated “to be expected in Montana”.—KLAUS H. LACKSCHEWITZ, Department of Botany, University of Montana, Missoula 59801.

REVIEWS

A field guide to the common and interesting plants of Baja California. By JEANETTE COYLE and NORMAN C. ROBERTS. xi + 206 pp., 189 color photographs, drawings, 2 maps. Natural History Publishing Co., P. O. Box 962, La Jolla, California. 1975. Hardbound, \$11.00; paper, \$8.50.

With the opening of the transpeninsular highway, more and more Gringo tourists are travelling through Baja California and seeing strange and intriguing plants. For the botany of desert parts of the peninsula, there is an excellent technical account, Shreve and Wiggins' *Vegetation and flora of the Sonoran Desert* (Stanford Univ. Press, 1964); but a need has now arisen for popular books for the average traveler. Besides the book under review, one other helps fill this need. *The Boojum and its home* by Robert R. Humphrey (Univ. Arizona Press, 1974) is mainly an account of one tree, the plant wonder most likely to arouse the curiosity of every traveler, known to natives as Cirio, to some Gringos as Boojum, and to botanists as *Fouquieria* (or *Idria*) *columnaris*. However, this book also tells much about Baja California in general and the central desert and its plants in particular. Coyle and Roberts' book, though less competent botanically, gives much broader coverage and so will better serve those who want just one book to tell them about more different plants.

The introduction briefly discusses the physical setting, climate, geology (by Dr. Richard P. Phillips), phytogeographic regions, endemism, and origins of the flora. The rough map of phytogeographic areas shows several areas of "Mountain Forest" scattered the length of the peninsula, for which no explanation appears in the text; these are in no sense one phytogeographic area. Next comes a key to those families represented in the book—a key clearly extracted, without acknowledgment, from Shreve and Wiggins. The "Family List" that follows is a table of contents without page numbers; spread over 11 pages, it is filler serving no obvious purpose. The "Phytogeographic Lists" might better have been incorporated into the discussion of phytogeographic regions. Illustrations of botanical terms are sketchy and drawn without understanding, and some are misleading. At the back of the book are a glossary of botanical terms and Spanish words, a bibliography, and the usual index.

The reason for the family key is not clear. Most users of the book will be non-botanists, who will find plants by thumbing through and looking at pictures; this technical key, including undefined terms and having no explanation of its use, will do nothing for them. And if *they* don't really need the key, why should a botanist? He probably will prefer the easy way like everyone else rather than keying the plant just to show he knows how. (If he should prefer to use the key, the wary botanist may first check the pictures to be sure his plant is in the book.) For plants not in the book, a key to *some* families is more frustrating than useful.

The main part of the book, 138 pages worth, is an account of the 181 plants illustrated in color, with briefer mention of 74 more. Plates and text are conveniently placed on facing pages. For each plant are given the scientific name, the family name, the English and Spanish common names, if known. A short description follows, with a statement of range and flowering time. Then, very commonly, there is information about uses and other points of interest—which is one of the best features of the book.

The book includes some plants that the traveler down the main highway will not see, such as conifers of the northern mountains. The decision of what plants to include doubtless was influenced by what pictures were available; some of these were not taken in Baja California. *Opuntia basilaris*, if it occurs there at all, would never be voted the prickly pear most likely to be encountered by the casual visitor: at least I, as a less casual visitor, have yet to see it. Generally speaking, however, the selection of plants seems reasonably good.

The photographs are mostly about 3 by 3¼ inches and arranged three to a page. Most are good, though a few are too dark, and most will help greatly in identifying plants. However, eight are not identified to species, and several appear to be misidentified. Most of the photographs were taken by non-botanists, who did not bring back specimens for checking, and sometimes identification of pictures is difficult. For anyone wanting another view of some identifications, I list mine here with page number and "U", "M", or "L", for upper, middle, or lower: 45L, *Typha latifolia*; 53L, *Juncus acutus*; 55U, *Nolina bigelovii*; 73L, *Abronia* × *platyphylla*; 75L, *Romneya coulteri*; 79U, *Dudleya pulverulenta*; 79M, *Dudleya attenuata*; 97U,

Astragalus douglasii; 101U, *Lupinus succulentus*; 103U, *Krameria grayi*; 115L, *Bursera microphylla*; 135M, *Ferocactus acanthodes*; 135L, *Ferocactus peninsulæ*; 143L, *Opuntia basilaris*; 145U, *Lemaireocereus thurberi*; 149U, *Arctostaphylos pungens*; 149M, *Limonium perezii* (not the native species but a Canary Island plant grown and sometimes escaping in southern California); 153L, *Eriodictyon lanatum*; 157L, *Datura wrightii*; 159U, *Lycium* sp., not *L. californicum*; 161U, *Castilleja affinis*; 175M, *Amauria rotundifolia*; 175L, *Helianthus gracilentus*.

The text is inaccurate in many details. For example, elevations for various northern plants, evidently taken from California floras, are not correct for Baja California—where the same plants commonly occur higher. Thus in Baja California the Sugar Pine seldom straggles below 1800m (6000 ft) and certainly never down to 600m (2000 ft.). Also the book needs more editing and is marred by more than the usual number of typhogarpicxl errors, especially in plant names.

This is the first of a projected series of nature guides from a publishing company established for the purpose. It sets a good standard for quality of color illustrations and general appearance of the book. However, there should be more emphasis on quality of text.—REID MORAN, Natural History Museum, San Diego, California 92112.

The grasses of Texas. By FRANK W. GOULD. 653 pp. + viii, 330 figs. Texas A & M University Press, College Station, Texas. 1975. \$20.00.

The very richness of the Texas grass flora alone makes the appearance of Frank Gould's latest book of major importance to students of the family. About two-thirds of the genera and over one-third of all the grass species known from the conterminous United States occur in Texas. Although the dust jacket states that the book is intended for the botanist and the rancher with little specialized training, Dr. Gould has presented us with a complete and taxonomically rigorous treatment that is probably too advanced to appeal to the casually interested rancher or naturalist.

Introductory material on the structure of the grass plant and spikelet terminology is well done and adequately illustrated. These discussions, along with those of the vegetation areas of Texas, are taken primarily from earlier works of the author. The generic key is innovative in its use of some new characters and in its departure from the traditional format that employs preliminary stops at the subfamily and tribe levels. It is a welcome change. However, the key is sometimes awkward because of a mixture of generic names, lettered groups, and numbered groups that must be properly traced.

The system of subfamilies and tribes used by Gould is one that is gaining general acceptance. Perhaps only the names Pooideae and Poeae might be unfamiliar to many of us who have watched the once widely accepted scheme of George Bentham undergo major revisions. Gould's elevation of *Dichantherium* and his acceptance of *Hemarthria* and *Coelorachis* mark a further adjustment in the generic names of U. S. grasses.

Descriptions of the taxa are well done. The information is complete and the use of bold-face type for scientific names and italics for subheadings makes for easy reading. While Gould generally follows recent or standard monographic treatments, his decision to recognize only about one-third of the *Dichantherium* entities listed for Texas by Hitchcock and Chase is a most admirable exception. The systematic or agronomic commentary that accompanies many of the descriptions is both interesting and useful. Distribution of a species within the state is given in terms of the vegetation regions; general distribution is also cited.

The illustrations, particularly those of Valloo Kapadia, add much to the appearance and utility of the book. Most of the drawings, however, are taken from previously published works of the author and from other sources. Because of stylistic differences, the variation in the drawings is sometimes mildly distracting.

Texas now has a first-rate grass flora, certainly more modern and probably better than that of any other state. Students of agrostology have an important new reference.—JAMES PAYNE SMITH, JR., Department of Biology, Humboldt State University, Arcata, California 95521.